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General Physiology is the study of biological mechanisms through analytical investigations, which decipher the molecular and cellular mechanisms underlying biological function at all levels of organization.

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77 **Correction**

79 **Abstracts of Papers at The Sixty-Third Annual Meeting of The Society of General Physiologists: MUSCLE in Health and Disease**

Cover picture: Structural model of a two-pore domain potassium channel: K2PØ viewed from the cytoplasm. The channel is composed of two subunits (purple and blue) with a bilaterally symmetric cytoplasmic cavity and fourfold symmetric selectivity filter. Wild-type currents (left) are inhibited by introduction of a charge at the bottom of the selectivity filter (middle, +), and positions were then identified where addition of a countercharge restored channel function (right, −) (see article by Kollewe et al., 53–68).

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Cover picture: Point mutations that cause the CNGA1 channel to become voltage-gated are clustered around the ion selectivity filter. (Top and Middle) Alanine substitutions at red- and yellow-colored positions produce channels with strongly and modestly voltage-gated currents, respectively, whereas those at blue-colored positions yield unmeasurable currents. The remaining mutations produce non-voltage–gated currents. (Bottom) Degree of voltage gating of mutant channels, expressed as the ratio of current at two holding potentials (I_{200}/I_{-200} or I_{200}/I_{10}) (see article by Martínez-François et al., 151–164).

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Cover picture: Evolution of retinol fluorescence in bleached rod photoreceptors. (Top) After pigment bleaching, fluorescence reflecting all-*trans* retinol generated by reduction of all-*trans* retinal is initially measurable at the base of the outer segment and gradually progresses to the tip. (Bottom) A model whereby reduction cofactor NADPH is generated in the ellipsoid region of the inner segment and diffuses along the outer segment can explain the observed fluorescence pattern (see article by Miyagishima et al., 165–175).

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Cover picture: Suppression of Ca^{2+} syntillas in chromaffin cells increases frequency and quantal size of exocytotic events. (Top) Ca^{2+} imaging of syntillas demonstrates presence in control cell (left) and absence with ryanodine treatment (right), displayed as pseudo-colored change in fluorescence from baseline. (Middle) Amperometric current recorded from the cell depicted above. (Bottom) Summarized effects of ryanodine (see article by Lefkowitz et al., 267–280).

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Cover picture: N-current enhancement and inhibition occurs by arachidonic acid (AA) interacting with $Ca_V2.2$ at two different sites. Inhibition predominates (top) in β3-containing channels. However, coexpression of palmitoylated β2a with $Ca_V2.2$ blocks inhibition, revealing latent enhancement (middle; see article by Heneghan et al., 369–384). Deletion of two amino acids in $Ca_V2.2$'s I-II linker reorients β2a, such that current inhibition is regained even in the presence of palmitoylated β2a (bottom; see article by Mitra-Ganguli et al., 385–396).

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523 Correction

525 Correction

Cover picture: Pixel-by-pixel Förster resonance energy transfer (FRET) amplitude distribution profiles from cells expressing fluorescent GAT1 GABA transporters correlate with transporter oligomerization states and function. (Top) Normalized FRET (NFRET) between coexpressed CFP- and YFP-tagged GAT1 constructs is analyzed by region of interest (ROI). Bars, 10 µm. (Bottom) GAT1 dimers, high-order oligomers, and transporters forming PDZ-mediated interactions with the cytoskeleton and/or the exocyst are resolved as distinct Gaussian components of the NFRET distributions (see tutorial research article by Moss et al., 489–521).